

What is claimed is:

1. A digital device for inputting data from the other specific digital device to a physical plug and outputting data from a physical plug to the other specific digital device by using a channel of a bus interface, which comprising:

configuration information including connection information between a channel of a bus interface and a physical plug, and priority information of channels of a bus interface judged from the aspect of each physical plug; and

10 channel selecting means selecting a channel with the highest priority among channels of a bus interface connected with the specific physical plug by referring to the configuration information.

2. A digital device according to claim 1, which comprising:

15 the configuration information further including priority information of physical plugs judged from the aspect of each channel of a bus interface; and

channel switching means, in case of the competition for the channels of the bus interface, switching the channel to a physical plug
20 with the highest priority among physical plugs in competition by referring to the configuration information.

3. A digital device for controlling by a physical plug to output data from a physical plug to the other specific digital device by using a
25 channel of a bus interface, wherein, in case of outputting data having the same type of format from a plural physical plug, the data output having the same type of format is to be controlled by a logical plug.

4. A digital device according to either one of claim 1 to 3, wherein
the data is synchronous stream one.

5 5. A digital device according to either one of claim 1 to 3, wherein
the bus interface is compliant with the standard of IEEE1394.

6. A data input-output control method of a digital device for
inputting data from the other specific digital device to a physical plug
10 and outputting data from a physical plug to the other specific digital
device by using a channel of a bus interface, which comprising a step of:

registering as configuration information at least connection
information between a channel of a bus interface and a physical plug,
and priority information of channels of a bus interface judged from the
15 aspect of each physical plug; and

selecting a channel with the highest priority among channels
of a bus interface connected with a specific physical plug by referring to
the configuration information.

20 7. A data input-output control method of a digital device
according to claim 6, which comprising a further step of:

registering as configuration information priority information
of physical plugs judged from the aspect of each channel of a bus
interface; and

25 in case of the competition for the channels of a bus interface,
switching the channel to a physical plug with the highest priority among

the physical plugs in competition by referring to the configuration information.

8. A data input-output control method of a digital device for controlling by a physical plug to output the data from a physical plug to the other specific digital device by using a channel of a bus interface, wherein, in case of outputting data having the same type of format from a plural physical plug, the data output having the same type of format is to be controlled by a logical plug.

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9. Configuration information for implementing a data input-output control function of a digital device for inputting data from the other specific digital device to a physical plug and outputting data from a physical plug to the other specific digital device by using a channel of a bus interface, which comprising at least connection information between a channel of a bus interface and a physical plug, and priority information of channels of a bus interface judged from the aspect of each physical plug.

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20 10. Configuration information according to claim 9, which further comprising priority information of physical plugs judged from the aspect of each channel of a bus interface.

25 11. A data input-output control system for controlling to input and output data between a specific digital device and the other specific digital device connected through a bus interface, which comprising:

configuration information including connection information between a channel of a bus interface and a physical plug, and priority information of channels of a bus interface judged from the aspect of each physical plug; and

- 5 channel selecting means selecting a channel with the highest priority among channels of a bus interface connected with the specific physical plug by referring to the configuration information.

12. A data input-output control system according to claim 11,
10 which further comprising:

the configuration information including priority information of physical plugs judged from the aspect of each channel of a bus interface;
and

- 15 channel switching means switching, in case of the competition for channels of a bus interface, the channel to a physical plug having the highest priority among physical plugs in competition by referring to the configuration information.